

XII. *Characters of seven nondescript Lucanoid Coleoptera, and remarks upon the genera Lissotes, Nigidius and Figulus.* By Major F. J. SIDNEY PARRY, F.L.S.

[Read 7th April, 1873.]

Lucanus Dybowski, ♂, Parry, (var. max.).

L. nigro-brunneus, mandibulis robustis, capite prothoraceque paulo longioribus, intus irregulariter quinque-dentatis, corpore subtus dense villosa, femoribus infra rubro-maculatis.

Closely allied to *L. Hopei* (vide Trans. Ent. Soc. 3rd Ser. vol. ii. p. 9, pl. vi. fig. 2), but the following differences upon comparison are found to be apparent. The mandibles are somewhat longer, less circumflex, and furnished with seven teeth instead of five, these being less regularly distributed: the basal tooth inclining internally, instead of externally as in *L. Hopei*; the posterior angles of the head are considerably more rounded; the suberect lobe, so conspicuous in the centre of the anterior margin of the head in *L. Hopei*, is also entirely wanting; moreover, the sides of the thorax are much less sinuate, with the anterior angles less produced. I have but little doubt that both these species in a normal condition are strongly pubescent upon the upper surface. I am indebted to Count Mniszech for the opportunity of notifying this interesting species. It has been named after a young and zealous Polish entomologist by whom it was captured, with other interesting novelties, in the district of the Amur River, Dauria, and transmitted to the Museum of Natural History in Warsaw. A specimen of *L. Dybowski* is to be met with among the insects recently sent to the Paris museum by Mons. l'Abbé David, from the province of Mou-Pin, Eastern Thibet.

Long. corp. unc. $1\frac{3}{4}$; mandib. lin. 10.

Coll. Mus. Varsoviensis, Jardin des Plantes et Mniszech.

Odontolabis Lowei, ♂, Parry (var. minor). (Pl. V. fig. 1.)

O. Brookeano proximus, testaceus, nitidus; mandibulis, capite, pedibusque nigris: subtus niger, maculis castaneis variegatus.

Mandibulæ capite breviores, porrectæ, leviter curvatæ, intus dentibus nodosis quinque armatæ.

Caput magnum, cum prothorace granulosum, antice emarginatum utrinque pone oculos dentatum, angulis ante oculos rotundatis, clypeo vix producto.

Prothorax transversus, plagâ magnâ nigrâ notatus, angulis posticis leviter emarginatis, profunde impressis.

Elytra testacea, nitida, glaberrima, sublente minute punctulata, basi, scutello, lineâ suturali, et limbo externo nigris.

Pedes antice elongati, tibiis curvatis, extus bidentatis, quatuor posticis inermibus, femoribus subtus plagâ castaneâ notatis.

Long. corp. unc. $2\frac{1}{2}$.

Hab.—Ins. Borneo.

Coll. Parry, ♂ (sp. unicum). ? ♀ Coll. Mniszech.

A remarkable similarity exists between *O. Lowei* and *O. Brookeanus*; upon closer examination, however, the two species are found to be abundantly distinct. Unfortunately, but one specimen of *O. Lowei* exhibiting a minor development of the mandibles has at present fallen under my notice, and having compared it with numerous specimens of *O. Brookeanus* exhibiting various degrees of development, the following differences are found apparent: The entire length of *Loweii*, $2\frac{1}{2}$ inches, exceeds considerably any specimen of its allied species I have met with. The differences in form and sculpture of the mandibles is at once conspicuous; instead of being semicircular, as they are invariably in *O. Brookeanus*, they are porrect, slightly curved from the base to the apex, much narrower, and with the upper surface more convex and covered with a dense granulation. The head is more elongate convex, with the antecular angles rounded, not acute, and the entire surface thickly granulated. The prothorax is wider, with a black plaga, covering nearly the entire upper surface, leaving only a very narrow rufous line at the base, with a somewhat broader one at the sides; the posterior angles are less emarginate, and the granulations are much denser. The elytra are more elongate and narrower posteriorly, very glabrous, and of a deeper yellow colour; the under

sides present a remarkable difference in coloration, for instead of being, as in *O. Brookeanus*, uniformly testaceous, it is variegated. The whole of the reflexed margin, together with the epipleuræ, are black, as also the prothorax, save two indistinct lateral rufous patches.

This interesting addition to the *Lucanoid Coleoptera* was discovered by H. Lowe, Esq., a gentleman who has contributed so much to our knowledge of Bornean entomology.

Metopodontus Blanchardi, ♂, Parry (var. med.)
(Pl. V. fig. 2.)

M. lute fulvus, tenuissime granulosus.

Mandibulæ porrectæ, fere rectæ, capiti prothoracique æquales dente magno ad basin et quatuor alteris minoribus subapicalibus, nigris, armatæ.

Caput antice valde excavatum, vertice bituberculato.

Prothorax capite latior, marginibus externis, lineâ medianâ cum maculis duabus, prope angulos posticis, nigris.

Elytra elongata, subconvexa, angulo humerali spino minimo instructo; scutello nigro, lineâ suturali et limbo externo anguste nigris. Corpus subtus nigrum, maculis luteis variegatum.

Pedes bicolores, tibiis anticis extus subserrulatis, quatuor posticis unidentatis.

Long. corp. unc. 1; mandib. lin. 6.

Hab.—Mongolia.

Coll. Parry, Mniszech et Mus. Paris.

M. Blanchardi is readily distinguished from its allied species, *M. cinnamomeus*, *M. castaneus* and *M. foveatus*, by its very pale luteous coloration, the form and armature of the mandibles, and especially by the narrow black central line exhibited on the disk of the prothorax; this character occurs only, to my knowledge, in two other insects belonging to this group, viz., the very rare *Proso-pocoilus suturalis* of Oliv., and in *P. Mohniki*, now described for the first time. To *P. occipitalis*, *M. Blanchardi* also bears a general resemblance, but the binodose front of the head necessitates its location in the genus *Metopodontus*. I may remark that I have recently seen a specimen of this insect, ticketed *M. Dauricus*, Motschulsky, in the collection of the Jardin des Plantes, collected, with various other interesting novelties, by

Mons. l'Abbé David, in the province of Mou-Pin, Eastern Thibet. This determination must, however, be erroneous (vide the author's paper on *Prismognathus Dauricus*, Etudes Entom. x. p. 10).

Prosopocoilus Mohniki, ♂, Parry, n. sp. (var. max.).
(Pl. V. fig. 3.)

P. occipitali proximus, rufo-castaneus, subnitidus.

Mandibulæ elongatæ, subdeplanatæ, irregulariter arcuatæ, basi fortiter excavato, dentibus tribus subapicalibus, et pone medium processu quadrinodoso armatæ.

Caput magnum, antice valde excavatum, suprâ convexum, crebre et fortiter granulosum, pone oculos inflatum, carinis duabus obliquis nigris, a medio versus oculos, notatum.

Prothorax capite latior, confertissime granulosus; maculâ disci triangulatâ, alterisque duabus versus angulos posticos; marginibus tenue nigris.

Elytra castanea, fere lævissima, scutello, lineâ basali, limbo externo, suturâque nigris; corpore subtus, cum pedibus, nigro-tinctis; tibiis anticis minute et irregulariter crenatis, quatuor posticis inermibus.

Long. corp. lin. 15; mandib. lin. 10.

Hab.—Java.

This species is closely related to *P. occipitalis*, Westw., but may readily be distinguished from it by its larger size and denser colour; its head is more deeply excavated in front, the carinæ are considerably longer, extending from the centre to the antecular angle, and the sides behind the eyes being merely swollen instead of dentate; the prothorax has a large central triangular black mark extending from the anterior to the posterior margin, and the elytra are very finely chagreened, whereas in the allied species they are distinctly punctate. We are indebted to Dr. Mohnike, a zealous entomologist long resident in the island of Java, for the discovery of the present species, stated to be from that island, where it has only recently been discovered, but in very great abundance. Unfortunately all the specimens captured of various stages of development were males. I possess from the island of Formosa a single female individual, which, were it not for the divergence of locality, I should feel disposed to refer to the present species.

Lissotes capito, ♂, H. Deyrolle; ♀, Parry.
(Pl. V. figs. 4 and 5.)

“Large, depressed, deep chestnut, the forehead and legs of a lighter hue, head and thorax very large.

“Head very large, with a triangular impression on the forehead, parallel at the sides, anterior angles rounded, shallowly semicircularly emarginate in front, tuberculated laterally behind the eyes; above smooth, without any trace of punctuation; beneath with a rather large triangular impression on each side for the reception of the antennæ in repose, these similar in structure to those of the allied species, the three apical joints produced into leaflets.

“Prothorax much dilated behind, anterior margin nearly straight; sides oblique, sinuated towards the middle, posterior margin semicircularly emarginate; anterior angles slightly, posterior angles strongly rounded; lateral and posterior margins margined and finely ciliated; above smooth, with a slight depression on each side, near the anterior margin; middle of disk and lateral margins slightly punctate.

“Scutellum short and broad, truncate behind.

“Elytra subparallel, slightly narrowed anteriorly; shoulders somewhat prominent in front, margined and ciliated at the sides, shining, covered with a sparse punctuation and a very short hispid golden-silky pubescence, each elytron with four rather obsolete ridges.

“Beneath with the abdomen somewhat thickly punctate, the punctuation sparser on the legs and thorax, with a pubescence similar to that on the upper surface, but shorter and denser; legs clothed with longer hairs, disposed in ciliæ on the intermediate and posterior tibiæ, the anterior tibiæ armed externally in front with two large teeth, and behind with five or six small ones.”

(H. DEYROLLE.)

L. capito, ♀.

The female with the body subdepressed, broad and flat, strongly punctured; anterior angles of the head less produced than in the male, armed with a minute tubercle behind the eyes, which are partially divided by the canthus. *Prothorax* slightly rounded at the sides, posterior angles scarcely emarginate, with a faint central longitudinal channel and a shallow depression on each side. *Elytra*, as in the male, slightly costate. *Scutellum*

exceedingly small, transverse. *Mandibles* short, tridentate at the apex. *Tarsi* short.

I am indebted to M. Henri Deyrolle for permission to incorporate the description of the ♂ in the present paper, and to the kindness of Mr. F. Pascoe to add a description of the ♀. A single example of the ♂ exists in the collection of Count Mnischech, and both sexes in that of Mr. Pascoe, their habitat being the Chatham Islands, situate about 400 miles from the eastern coast of New Zealand. I avail myself of the opportunity to add a few remarks upon the species composing the genus.

The genus *Lissotes* was proposed by Professor Westwood (vide Trans. Ent. Soc. N. S. iii. p. 213), and contains the numerous Australian species belonging to the family of the *Dorcidæ*, which are represented in South America by the *Sclerostomi* of Dr. Burmeister (vide Handbuch der Entomologie), and exhibit such diversity of form that I am now disposed to modify the grouping in my Catalogue of the several species at present known.

Professor Westwood (loc. cit., p. 214) distributes the species into two sections, characterized by the form of the mandibles; but subsequently, in describing some interesting new species (Trans. Ent. Soc. 1871, p. 353), he proposed other characters as distinguishing the Tasmanian species. It is upon these last characters that I have based the following tabular arrangement, embracing the whole of the Australian species at present known. I admit it is not quite satisfactory, since it involves the approximation of somewhat incongruous forms, yet it is nevertheless the best I can at present offer:—

- A. Posterior angles of prothorax oblique, with a prominent angle opposite the shoulders of elytra.
 - a. Fore margin of prothorax anteriorly produced in the middle.
 - * Prothorax with a small central polished tubercle. *L. cancroides*: *L. reticulatus*.
 - ** Prothorax with two small tubercles conjoined in middle of front margin. *L. Menalcas*: *L. subtuberculatus*.
 - *** Prothorax with produced lobe slightly emarginate. *L. punctulatus*. *L. Novæ Zealandiæ*.
 - b. Fore margin of the prothorax straight; front of the head strongly retuse. *L. capito*: *L. pelorides* (♀): *L. curvicornis*.
- B. Posterior lateral margins of prothorax rounded. *L. Launcestoni*: *L. obtusatus*: *L. opacus*: *L. latidens*: *L. foreipula*: *L. arcuatus*: *L. subcrenatus* (♀): *L. fuscicornis*.

Nigidius cribricollis, ♀?, Parry. (Pl. V. fig. 6.)

N. Delegorguei proximus, niger, vix nitidus, prothoracis disco, ubique regulariter punctato, in medio leviter sulcato, angulis anticis profunde incisus.

Mandibulæ punctatæ, dextra 1- sinistra 2-dentatæ, suprâ in cornu suberectum parvum productæ.

Caput suprâ valde excavatum, crebre et fortiter punctatum, lateribus ante oculos semicirculariter productis.

Prothorax ubique regulariter punctatus, leviter canaliculatus, margine antico tuberculato.

Elytra anguste costata, interstitiis crebre et irregulariter punctatis, corpore subtus ubique grosse et fortiter punctato.

Long. corp. lin. 7.

Hab.—Afric. Occid.

In Coll. Mus. Brit., Mniszech, et Parry.

Allied to *N. Delegorguei*, Thomson, but at once distinguished by the wider and more deeply excavated head, by the strongly emarginate anterior angles of the prothorax, as well as by the more uniform character of its sculpture; the punctuation being regular and extending over the entire upper surface of the prothorax, a character not exhibited in any other of the African species; it is, moreover, not nearly so shining.

In the British Museum collection there exists a specimen of this insect, labelled "*Nigidius cribricollis*," Reiche, a manuscript name which I have much pleasure in adopting.

Nigidius distinctus, ♂, Parry, n. sp. (Pl. V. fig. 7.)

N. cornuto M'Leay, proximus, ater, nitidus, punctatissimus, angulis ante oculos incisus.

Mandibulæ punctatæ, sinistra bidentata, dextra inermis, suprâ in cornu magnum curvatum suberectum, productæ.

Caput antice excavatum, grosse punctatum, ante oculos emarginatum.

Prothorax lateribus rectis, angulis anticis rotundatis posticisque sinuatis, in medio longitudinaliter sulcatus margine antico elevato, tuberculo minutissimo instructo.

Elytra ad basin prothorace paulo angustiora, versus apicem latiora, singulis striis 8 elevatis lævibus, interstitiis grosse punctatis, angulo humerali acuto; tibiis anticis 5 aut 6 tuberculis parvis, quatuor posticisque infra medium spino singulo acuto armatis, corpore subtus punctatissimo.

Long. corp. lin. 7.

Hab.—Cambodia.

Coll. Mniszech et Parry.

N. distinctus is distinguished from all the other known species of the genus by the sides of the head being emarginate instead of rounded, forming two distinct acute

angles, the punctuation is also considerably stronger (with the exception of *N. obesus*) than in all the other Asiatic species we are at present acquainted with; the scrobiculate character of the punctuation exhibited in the interior of the fovea on the thorax in the African species appears to be wanting. I am indebted to Count Mniszech for the specimen I possess.

Nigidius Bubalus, Swed. Act. Holm. 1787, pl. viii. fig. a, b, c.

auriculatus, Klug, Erm. Reis. 1835.

integer, Westw. Ent. Mag. v. 1838.

Midas, De Casteln. Hist. Nat. Ins. 1840.

nitidus, Thomson, Ann. Soc. Ent. Fr. 1862.

?* *vervex* (*Figulus*), Dej. Cat. sec. Burm. Handb. v. p. 432.

As no well authenticated specimen of this insect has fallen under my notice, I am not in a position to decide as to which of the West African species of *Nigidius* at present known *N. Bubalus* of Swederus is to be referred; it has even been suggested to me that the insect in question might possibly not even belong to this genus; but I think from the description, as well as from the figures (although but indifferently executed), that there can be but little doubt upon this point. The habitat given by the author, of North America, is evidently erroneous; and seeing that Drury's collection was especially rich in West African species, it is most probable that from thence the insect originated. (Possibly the type specimen may still exist in the late Mr. Macleay's collection in Australia, who, if I am correctly informed, purchased largely at the sale of Drury's collection.) Judging from the description and the figures given, the following two species, viz. *N. auriculatus*, Klug, and *N. auriculatus*, Guérin, both from West Africa, appear to me to be the most nearly allied to *Bubalus*; but as Swederus, neither in the description, nor the figures, alludes to a very important character peculiar to *N. auriculatus* of Guérin, viz. the deeply emarginated anterior angles of the prothorax, a character which does not exist in *N. auriculatus*, Klug, I am very much disposed to believe that the above synonymical arrangement will prove to be correct, especially as, through the kindness of Professor

* Professor Westwood, *loc. cit.*, notifies *F. vervex*, Dej., as being identical with *N. auriculatus*, Guérin.

Westwood and Count Mniszech, considerable additional material, enabling me to arrive at this conclusion, has been available to me.

The species composing the genus *Nigidius* may be sectionized thus :—

- A. Mandibles robust, with a recurved process at the base in both sexes, less produced in the females.
 - a. Prothorax rugose, punctate with a central fovea, anterior angles more or less emarginate. *N. grandis*: *N. Delegorguei*: *N. auriculatus*: *N. cribricollis*.
 - * Anterior angles of prothorax non-emarginate. *N. Bubalus*: *N. cornutus*: *N. distinctus*: *N. obesus*.
 - b. Prothorax smooth, non-foveate; anterior angles of prothorax produced, non-emarginate. *N. levicollis*: *N. formosanus*.
- B. Mandibles ♂ slender, evidently recurved at the apex, with a nodose tubercle at the base; ♀ mandibles less recurved and simple. Prothorax smooth, non-foveate. *N. Madagascariensis*.
- C. Mandibles simple. Prothorax smooth, with a central fovea. *N. Parryi*: *N. trilobatus*.

Figulus sublævis, Palis. de Beauv. (*Lucanus*), Ins. Afric. et Amér. i. 3.

sublævis, Westw. Ent. Mag. v. p. 262.

„ Burm. Handb. der Ent. p. 436.

anthracinus, Klug, Ins. Madg. 85.

ebenus, Westw. loc. cit.

nigrita, Westw. loc. cit.

monilifer, Parry, Proc. Ent. Soc. 1862, p. 113.

Having recently had the opportunity of examining numerous specimens of the several insects alluded to above, I have arrived at the conclusion that Dr. Burmeister (loc. cit.) is fully justified in uniting them as one species. With reference to the character specifically assigned, to the number of striæ exhibited on the elytra, this character is found, as already alluded to by Dr. Burmeister, to be most capricious: the striæ, or their rudiments, varying from 1 to 6.

In the var. *F. nigrita*, Westw., exhibiting a somewhat small development of this species, the punctuation on the sides of the prothorax is somewhat stronger, but in other respects corresponds with a specimen in my collection of *F. anthracinus*, Klug.

Figulus trilobus, Westw. Ent. Mag. v. 263.

Hab.—N. Hollandia.

Figulus trilobus may, I think, with great propriety be removed to the genus *Nigidius*, to which it appears to me

to assimilate more closely in the following respects: the short robust mandibles, which are slightly recurved at the apex; the deeply excavate head, with the sides rounded and strongly produced; the form of the thorax, with its anterior trilobate process; and, finally, the elytra, on which the costa are more prominently defined, the sculpture of the interstices, as well as the punctuation, being considerably stronger than in any species pertaining to the genus *Figulus*. *N. trilobus* belongs to the third section of the genus, characterized by the mandibles being simple, or unarmed, on their upper surface.

FIGULUS.

Sectional arrangement.

The species belonging to the genus *Figulus* may be thus sectionized:—

- A. Elytra smooth, partially striate. *F. levipennis*.
- B. Elytra partially, but irregularly, punctate-striate. *F. sublaevis*.
- C. Elytra regularly punctate-striate. *F. striatus*, *F. regularis*, *F. foveicollis*, *Manillarum*, *Scaritifformis*, and others.

XIII. Remarks on the affinities of the genus *Nicagus*, Lcconte. By Mons. Henri Deyrolle. Communicated in a letter to Major F. J. Sidney Parry, F.L.S.

“I have availed myself during the past few days of certain leisure time to examine your beetle attentively, and regret that I am compelled to differ entirely from our learned and esteemed friend Mr. Westwood,* and find that it is impossible to separate *Nicagus* from the *Lucanidæ*, and that I cannot locate it satisfactorily among the *Lamellicornia*, in whatever group I attempt to place it.

“It presents one slight differential character, and one alone, from the *Lucanidæ*, namely, the narrow *mentum*, but in all other respects it coincides so entirely that I have not the shadow of a doubt that the position of *Nicagus* is in close proximity to *Mitophyllus*.

“Observe that *all* its organs correspond with those of that group; take for instance for comparison a female specimen of your *M. irroratus*: the *head* I find is nearly similar; the *antennæ* likewise, with the lamellæ a trifle thicker; the *prothorax* agrees in every respect with that

* Proc. Ent. Soc., 7 March, 1870.